

# FGDS Development Unit 2 Landfill

Groundwater Monitoring System Certification 40 CFR 257.91(4)

Groundwater Statistical Method Certification 40 CFR 257.93(f)(6)

February 2025

City Water, Light and Power

Springfield, Illinois



Prepared by:

Environmental, Health & Safety, CWLP

## Professional Engineer Certification – Groundwater Monitoring Program

### 40 CFR § 257.91(f) Groundwater Monitoring System Certification

In accordance with Title 40 of the Code of Federal Regulations (40 CFR), Part 257, Subpart D, Section 257.91(f) the owner or operator of a coal combustion residuals (CCR) unit must obtain certification from a qualified professional engineer stating that the groundwater monitoring system at the CCR unit has been designed and constructed to meet the requirements of 40 C.F.R. § 257.91. If the groundwater monitoring system includes the minimum number of monitoring wells specified in 40 C.F.R. §257.91(c)(1), the certification must document the basis supporting use of the minimum number of monitoring wells. Further, in accordance with 40 C.F.R. §257.91(e)(1), when completing the groundwater monitoring system certification, the qualified professional engineer must be given access to documentation regarding the design, installation, development, and decommissioning of any monitoring wells, piezometers, and other measurement, sampling, and analytical devices.

The groundwater monitoring system designed and constructed for the City Water, Light, and Power (CWLP) landfill includes more than the minimum number of wells specified in 40 C.F.R. §257.91(c)(1). The undersigned has been given access to documentation regarding the design, installation, development, and decommissioning of monitoring wells, piezometers and other measurement, sampling, and analytical devices concerning the CWLP landfill.

*I, Karl W. Finke, a qualified professional engineer in good standing in the State of Illinois, certify that the groundwater monitoring system at the CWLP landfill has been designed and constructed to meet the requirements of 40 C.F.R. §257.91.*

Signature: \_\_\_\_\_

Karl W. Finke

Illinois P.E. No: \_\_\_\_\_

062.068571

Date: \_\_\_\_\_

02/21/25




# Professional Engineer Certification – Statistical Analysis Plan

## 40 CFR § 257.93(f)(6) Statistical Method Certification

In accordance with Title 40 Code of Federal Regulations (40 CFR) Part 257, Subpart D, Section 257.93(f)(6), the owner or operator of a coal combustion residual (CCR) unit must obtain a certification from a qualified professional engineer that the selected statistical method is appropriate for evaluating the groundwater monitoring data for the CCR management area.

This certification is based on the description of the statistical methods selected to evaluate groundwater as presented in the Statistical Analysis Plan, prepared for City Water, Light, and Power, and dated February 6, 2024. The procedures described in the plan will be used to establish background conditions and implement detection, assessment, and corrective action monitoring as necessary and required by 40 CFR §257.93-257.95. The Statistical Analysis Plan was prepared in accordance with the requirements of 40 CFR §257.93, with reference to the acceptable statistical procedures provided in USEPA's Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance (March 2009), and is intended to provide a logical process and framework for conducting the statistical analysis of the data obtained during groundwater monitoring. In accordance with 40 CFR §257.93(f), the statistical method chosen for analysis of groundwater monitoring data will initially be the prediction interval procedure or control chart approach for each Appendix III constituent, and either the tolerance interval or the prediction interval procedure for each Appendix IV constituent at this CCR unit per 40 CFR §257.93(f)(3), in which the interval is established from the background data and compared to the level of each Appendix III constituent in each compliance well, or a confidence interval for each Appendix IV constituent in each compliance well.

*I, Karl W. Finke, a qualified professional engineer in good standing in the State of Illinois, certify that the statistical methods described in this document, as supported by the Statistical Analysis Plan in the facility's Operating Record, are appropriate for evaluating the groundwater monitoring data for the CCR management area.*

Signature:   
Illinois P.E. No: 062.068571  
Date: 02/21/25

